

Amendments to specification of 12. January 2005.

1. Please add the title heading paragraph at the beginning of the specification:

TITLE OF THE INVENTION

2. Please replace two heading paragraphs immediately following the title:

DESCRIPTION OF THE INVENTION

1. FIELD OF THE INVENTION

with paragraphs which also include section headings according to prescribed specification format:

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CROSS REFERENCE TO THE RELATED APPLICATIONS

P980536A, Croatia, filled 05. Oct. 1998.

PCT/HR99/00022, filled 29. Sep. 1999., amended 04.Oct.2000.

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

Not applicable

INCORPORATION BY REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC AND REFERENCE TO A MICROFICHE APPENDIX

Not applicable

BACKGROUND OF THE INVENTION

FIELD OF THE INVENTION

3. Please replace the heading paragraph

2. TECHNICAL PROBLEM

with the heading paragraph

DESCRIPTION OF RELATED ART

4. Please delete the heading paragraph:

3. PRESENT STATE OF THE TECHNIQUE

5. Please replace the heading paragraph:

4. THE INVENTION ESSENCE EXPOSITION

with paragraphs which also include section headings according to prescribed specification format. The "Brief summary" is actually a copy of the Abstract, and "Brief description of drawings" is a copy of the former section 5 "Short description of figures", moved from page 19 without change:

BRIEF SUMMARY OF THE INVENTION

In packet switching telecommunications networks, flow control is used to obtain optimal network working point, regulating the transmitter packet sending rate. The state of overload (congestion) or underutilization of the network can be detected explicitly using signalling from network nodes, or implicitly using number of packet (window W) and round trip time (T) measurements.

The Window-Time-Space Flow Control, WTFC is a method of determining the belonging part of network capacity, optimal packet sending rate and optimal window, based on the measured W, T point in the window-time space and knowledge about total network capacity W_0, T_0 . In this way, devices with WTFC, nodes and terminals, keep optimal network working point near the on average empty queues mode of operation.

With networks utilizing WTFC, nodes can signal network parameters at connection establishment only. After that, all WTFC processing is done by terminal packet transmitter. WTFC transmitter determines both optimal window and optimal sending rate, thus improving regulation stability, limiting the number of packets in the network, and decreasing the variance of transmission rate.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

Figures 1 - 11 are used in detailed description of the invention to achieve easier invention understanding. Figures 1 and 2 present the structure of WTFC devices, and the rest of them are used to illustrate the operation of WTFC algorithms.

Figure 1. WTFC terminal structure

Figure 2. WTFC node structure

Figure 3. Queuing system with one server

Figure 4. Delay curves and optimal working point for M/M/1, G/G/1 and D/D/1 models

Figure 5. D/D/1/W model response

Figure 6. Family of delay curves depending on α

Figure 7. Optimal working point calculation

Figure 8. Constrains in W,T plane

Figure 9. Connection startup algorithm, with packet pair

Figure 10. Packet sending algorithm after first acknowledgment

Figure 11. Window calculation for a) window control and b) combined control

DETAILED DESCRIPTION OF THE INVENTION

6. Please delete the section "5. SHORT DESCRIPTION OF FIGURES" because it has been moved in front by instruction 5.

7. Please replace the heading paragraph

6. DESCRIPTION OF INVENTION REALIZATION

with the heading paragraph

Invention realization and application

8. Please delete the heading paragraph:

7. DESCRIPTION OF INVENTION APPLICATION

9. Please add new sections "Abstract" and "Sequence listing" as separate sheets: